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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,935	10/03/2003	Matthew L. Cooper	FXPL-01085US0	1199
23910	7590	12/26/2007	EXAMINER	
FLIESLER MEYER LLP			AKHAVANNIK, HADI	
650 CALIFORNIA STREET			ART UNIT	
14TH FLOOR			PAPER NUMBER	
SAN FRANCISCO, CA 94108			2624	
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			12/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/678,935	Applicant(s) COOPER ET AL.	
	Examiner Hadi Akhavannik	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

101 rejection is withdrawn.

The new drawings submitted 10/11/07 are accepted.

Applicant's arguments filed 9/18/07 have been fully considered but they are not persuasive. The Applicant argues that Crinon does not teach that the selected key frame is both representative from the segment it originates from and is distinguishable over the remaining plurality of segments. The Examiner disagrees, please see column 8 lines 9-61 as it discloses choosing boundaries that represent segments. The system looks at all the frame in the video to choose boundaries that are substantially different from each other and the key frames are then selected from within each boundary. So, the key frames will be distinguishable from each other because the frames they are selected from are different from each other.

Please see the final rejection below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2 and 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Crinon (6331859, referred to as "Crinon" herein).

Regarding claim 1, Crinon discloses a method for discriminatively selecting key frames representative of segments of a source digital media (see abstract),

comprising the steps of: obtaining said source digital media for which key frames are to be selected (see column 4 line 66 to column 5 line 5, and column 5 lines 10-15 discloses using feature vectors to select the best frame that represents a segment),

wherein said digital information contains a plurality of segments (column 7 line 7 to column 8 line 61 discloses multiple methods of partitioning the source media into segments);

pre-processing said digital information to obtain a plurality of feature vectors and discriminatively selecting a key frame for each segment wherein each selected key frame is both representative of the segment the selected keyframe originates from and distinguishable from other selected key frames which are representative of the remaining plurality of segments (as written above column 5 lines 9-15 discloses selecting the best frame that is the most representative of a set and column 8 lines 9-61 as it discloses choosing boundaries that represent segments. The system looks at all the frame in the video to choose boundaries that are substantially different from each other and the key frames are then selected from within each boundary. So, the key frames will be distinguishable from each other because the frames they are selected from are different from each other).

Regarding claim 2, Crinon discloses discriminatively selecting a key frame includes: maximizing a goodness function F for said digital media (Crinon discloses selecting vectors of a set based on their relative cumulative distances. This functions to

maximize a goodness function because it allows the system to select the most representative frame).

Regarding claims 12-13, the rejection of claim 1 discloses that Crinon finds the feature vectors which represents a frame, that are most representative of a segment or group of frames. Please note that this is essentially the definition of a key frame as defined by Crinon.

Regarding claim 14, Crinon discloses discriminatively selecting a keyframe further includes the steps of: comparing a candidate keyframe with other frames from a segment; and, determining a similarity value of said candidate keyframe dependent upon said step of comparing (see column 5 lines 1-55, as it discloses comparing the cumulative distances of the vectors that represent the keyframe to the other feature vectors.

Regarding claim 15, Crinon discloses finding both the similarity and dis-similarity values in column 5 lines 35-65. Crinon discloses finding the greatest and least cumulative distances.

Regarding claim 16, Crinon discloses discriminatively selecting a keyframe further includes the steps of: comparing a candidate keyframe for a first segment of said plurality of segments with other frames from said first segment; determining a similarity value of said candidate keyframe dependent upon said step of comparing a candidate keyframe for a first segment; comparing said candidate keyframe with frames from the remaining plurality of segments; determining a dis-similarity value of said candidate keyframe dependent upon said step of comparing said candidate keyframe with frames

from the remaining plurality of segments; and, selecting a keyframe based upon said similarity value and said dis-similarity value that is both representative of said first segment and distinguishable from other selected keyframes (the rejection of claim 15 and column 5 line 65 to column 8 line 62 disclose a segmenting means which finds the similarity value and the dissimilarity value by comparing the feature vectors of each key frame against its segment. In addition it teaches that the key frame must differ substantially from the other segments in column 5 lines 9-26).

Regarding claims 17-20 please see the rejection of claims 1-2 and 12-16 as they disclose all aspects of claims 17-20.

Regarding claim 21, the rejection of claim 16 above discloses all aspects of claim 21.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crinon (6331859, referred to as "Crinon" herein) in view of Hansen et al. (20020038456, referred to as "Hansen" herein).

Regarding claim 3, Crinon discloses all aspects of claim 3, except he does not explicitly disclose using a plurality of digital media.

Hansen discloses using a plurality of digital media (see abstract, paragraphs 26-27 and 85-86 as they disclose concatenating multiple types of media such as still media, video clips and other visual and audio clips).

It would have been obvious at the time of the invention to one of ordinary skill in the art to include in Crinon a multiple type of media concatenating method as taught by Crinon. The reason for the combination is because it makes for a more robust system that is able to function on multiple types of system that are presented to it in one stream.

Regarding claim 4, the rejection of claim 3 discloses concatenating the plurality of digital media.

Regarding claim 5, paragraph 26 of Hansen and column 4 lines 34-65 of Crinon discloses using digital video.

Regarding claims 6-7, paragraph 26 of Hansen discloses both audio and image data.

Regarding claim 8, the examiner takes official notice that it would have been exceedingly obvious to one of ordinary skill in the art to include in the combination of Crinon and Hansen digital text. The reason for this is because Hansen already discloses "other visual and audio data" (paragraph 26 of Hansen) and digital text is a common type of other visual data.

Regarding claim 9, Hansen discloses concatenating multiple digital media such as image and video (see the rejection of claim 3).

Regarding claim 10, Crinon discloses determining if multiple digital media are present in order to concatenate the digital media into a single digital media (see the rejection of claim 3, specifically see the abstract).

Regarding claim 11, the rejection of claim 3 discloses that multiple micro channels, each having their own digital media, are sent to the distribution system to create one stream of digital data. And, in order to concatenate the digital media the system must realize what types of media are being sent from each micro channel. See paragraphs 84-87 of Hansen for more details.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Akhavannik whose telephone number is 571-272-8622. The examiner can normally be reached on 10:30-7:00.

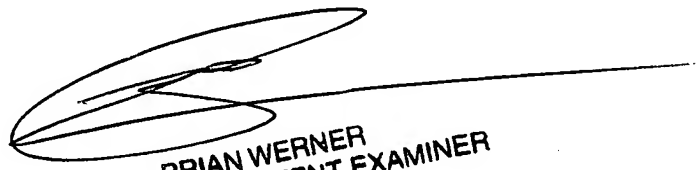
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on 517-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HA
12/17/07



BRIAN WERNER
SUPERVISORY PATENT EXAMINER